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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,451	01/16/2001	Joseph W. Tsang	10982033-1	5127

7590 10/03/2003

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EXAMINER

SHOSHO, CALLIE E

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/761,451	TSANG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Callie E. Shosho	1714	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

THE REPLY FILED 09 September 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a)  The period for reply expires 4 months from the mailing date of the final rejection.
- b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2.  The proposed amendment(s) will not be entered because:
  - (a)  they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b)  they raise the issue of new matter (see Note below);
  - (c)  they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_.

3.  Applicant's reply has overcome the following rejection(s): 35 USC 112 rejections of record.
4.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.
6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 10-27.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8.  The proposed drawing correction filed on \_\_\_\_\_ is a) approved or b) disapproved by the Examiner.
9.  Note the attached Information Disclosure Statement(s)( PTO-1449) Paper No(s). \_\_\_\_\_.
10.  Other: \_\_\_\_\_.

*Callie Shosho*  
Callie E. Shosho  
Primary Examiner  
Art Unit: 1714

**Attachment to Advisory Action**

1. Applicants' amendment and declaration filed 9/9/03 have been fully considered but they are not persuasive.

The amendment filed 9/9/03 overcomes the 35 USC 112 rejections of record, however, the amendment and declaration are not successful in overcoming the prior art rejections of record as set forth in paragraphs 5-10 of the office action mailed 5/10/03 for the reasons set forth below.

All the rejections of record utilize Kashiwazaki et al. (U.S. 5,640,187) in view of Lawrence et al. (U.S. 6,280,027) and Thompson et al. (U.S. 6,341,856).

Kashiwazaki et al. disclose fixative for ink jet printing wherein the fixative comprises vehicle and polyurethane, i.e. one-part system. However, the present claims are drawn to two-part system.

In attempting to meet the limitation of the present claims regarding two-part system, examiner set forth two arguments. On the one hand, for claims drawn to fixative, examiner argued that given that the present claims are drawn to fixative, and further given that the claimed fixative is the same as the fixative of Kashiwazaki et al. once the isocyanate and polyol are reacted on the printing medium, it was not seen how the process of forming the fixative by reacting ingredients on print medium to form polymer would lead to the claimed fixative as being patentable over the same fixative disclosed by directly jetting polymer onto print medium. On the other hand, examiner also combined Kashiwazaki et al. with Thompson et al., which is drawn to ink composition comprising polyisocyanate and polyol. Thompson et al. discloses that either the polyol and polyisocyanate are contained in the ink together or all the polyol is

contained in the ink while all the polyisocyanate is stored separately in another ink reservoir in order to prevent premature reaction between the polyisocyanate and the polyol.

Applicants have now filed 1.132 declaration which compares two-part fixer system with one-part fixer system.

The declaration shows that the two-part system is superior in terms of alkaline smearfastness, waterfastness, and/or smudgefastness or acid smearfastness.

However, the results of the declaration are not successful in establishing unexpected or surprising results over the cited prior art for the following reasons.

Firstly, the data is not commensurate in scope with the scope of the claims. Specifically, all the present claims require fixative containing (1) reactive isocyanate or epoxy-terminated oligomer in a vehicle and (2) at least one second component selected from the group consisting of polyols and polyvinyl alcohols plus a base catalyst.

However, in the inventive examples of the declaration found on page 2, the two-part fixer system comprises (1) isocyanate and (2) polyol in vehicle.

Thus, while the present claims require isocyanate in vehicle and polyol, the inventive examples of the declaration comprises isocyanate and polyol in vehicle.

Secondly, the declaration does not provide proper side-by-side comparison between two-part system and one-part system.

Specifically, the declaration compares the two-part system of example 20 with the one part system of examples 9 or 11 which use the fixer of example 3 or one-part system of examples 13, 15, or 17 which use the fixer of example 6. The vehicle of the two-part system comprises glycerol, tetrahydrofuran, and N-methyl pyrrolidone (as seen on page 2 of the

specification) while the vehicle of the one-part system of example 9 comprises 2-pyrrolidone, 1,5-pentanediol, and Surfynol (as seen on page 15 of the present specification) while the vehicle of the one-part system of examples 13, 15, or 17 comprises tetrahydrofuran or methyl ethyl ketone (as seen on page 16 of the present specification). Thus, it is not clear if the differences between the two-part system and one-part system as set forth in Table IV and Table V of the declaration are due to the differences in vehicle or due to the use of one-part system versus two-part system. Further, the declaration compares two-part system of example 20 with one-part system of examples 13, 15, or 17. The two-part system utilizes isocyanate and polyol which will react to form urethane polymer while the one-part system uses styrene-allyl alcohol polymer (see page 16 of the present specification). Thus, it is not clear if the differences between the two-part system and one-part system as set forth in Table V of the declaration are due to the differences in polymers utilized or due to the use of one-part versus two-part system.

**NOTE:** If applicants were to submit further amendment and/or declaration in response to examiner's position as set forth above, the amendment and/or declaration would be considered even though it is after-final.



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
9/30/03